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IN THE CLAIMS:

Please consider the claims as follows:

1.   (Currently amended) A method of regulating traffic in a communications network comprising the steps of:

aggregating one or more component traffic flows into a component traffic stream;

aggregating one or more component traffic streams into an aggregate stream;

carrying the aggregate stream in a single, FIFO queue; and

generating selective backpressure on selected ones of the component traffic streams such that selected ones of the component streams are desirably regulated;

said selective backpressure being generated in response to respective credit counters associated with said selected ones of the component traffic streams reaching a threshold level.

2.   (Previously presented) The method according to claim 1, wherein said aggregation of the one or more traffic flows is performed according to a destination of the traffic flows and the similarity of Quality of Service requirements of the traffic flows.

3.   (Previously presented) The method according to claim 1, wherein said aggregation of the one or more component traffic streams into said aggregate stream is performed according to a destination of the component traffic stream.

4.   (Previously presented) The method according to claim 3, wherein said aggregation is performed according to an absence of delay guarantees.

5.   (Cancelled)

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6.   (Cancelled)

7.   (Currently amended) The method according to claim 6 1 further comprising the steps of:

maintaining an aggregate queue occupancy counter;

initializing the credit counter to a maximum value;

decrementing the credit counter when an item of specific type arrives in the aggregate queue;

incrementing the credit counter when the queue is given service granted to the specific type of traffic stream without regard to the type of data item which departs the single FIFO queue;

truncating the credit counter at a specific maximum level; and

resetting the credit counter to a maximum value when the occupancy of the aggregate queue occupancy counter falls to zero.

8.   (Currently amended) The method according to claim 6, wherein said backpressure asserting generating step is performed when the credit counter reaches a value of zero.

9.   (Currently amended) The method according to claim [[4]] 1, wherein two of said component traffic streams are a Guaranteed Bandwidth Traffic Stream and a Best Effort Traffic Stream, and wherein each data item arrival and departure event can be associated with either guaranteed or excess bandwidth service provided by a corresponding scheduler.

10.   (Previously presented) The method according to claim 9, wherein the generating selective backpressure step further comprises the steps of:

maintaining an aggregate queue occupancy counter;

maintaining a Best Effort credit counter;

asserting a first backpressure signal; and

asserting a second backpressure signal.

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11. (Previously presented) The method according to claim 10 wherein said first backpressure signal is applied towards both the Guaranteed Bandwidth Traffic Stream and the Best Effort Traffic Stream and wherein said second backpressure signal applies toward the Best Effort Traffic Stream.

12. (Currently amended) The method according to claim 10, wherein said step of maintaining said Best Effort credit counter further comprises the steps of:
initializing the Best Effort credit counter to a maximum value;
incrementing the Best Effort credit counter when an excess bandwidth service is provided to said aggregate queue;
decrementing the Best Effort credit counter when a data item arrival is associated with excess bandwidth service; and
resetting the Best Effort credit counter to its maximum value each time the occupancy of said aggregate queue occupancy counter reaches a value of zero.

13. (Previously presented) The method according to claim 12 wherein said incrementing step is not performed if the first backpressure signal is asserted.

14. (Original) The method according to claim 12, wherein said decrementing step is not performed if the arriving data item belongs to the Guaranteed Bandwidth Traffic Stream.

15. (Previously presented) The method according to claim 10, wherein said step of asserting a first backpressure signal occurs whenever the aggregate queue occupancy counter exceeds a predefined threshold.

16. (Previously presented) The method according to claim 10, wherein said step of asserting a second backpressure signal occurs whenever the Best Effort credit counter reaches a value of zero.

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17.   (New) <u>An apparatus for regulating traffic in a communications network comprising:</u>

<u>means for aggregating one or more component traffic flows into a component traffic stream;</u>

<u>means for aggregating one or more component traffic streams into an aggregate stream;</u>

<u>means for carrying the aggregate stream in a single, FIFO queue; and</u>

<u>means for generating selective backpressure on selected ones of the component traffic streams such that selected ones of the component streams are desirably regulated;</u>

<u>means for said selective backpressure being generated in response to respective credit counters associated with said selected ones of the component traffic streams reaching a threshold level.</u>

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